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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,612	03/09/2001	Sami Uskela	617-010120-US	1625

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EXAMINER	
ZEWDU, MELESS NMN	

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/744,612	USKELA, SAMI	
	Examiner	Art Unit	
	Meless N. Zewdu	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15* is/are allowed.

6)☒ Claim(s) *1-5,7,9-13,16-20,24-28,32-34,37-40,44-47,50,51 and 53* is/are rejected.

7)☒ Claim(s) *6,8,21-23,29-31,35,36,41-43,48,49 and 52* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication filed on 8/31/05.

2. Claim 14 was previously cancelled.

3. Claims 16-53 have been added new.

4. Claims 1-13 and 16-53 are pending in this action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 7,12, 13, 16-20, 24-28, 32-34, 37-38, 40, 44-47, 50-51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 5,940,762) over Kozdon et al. (Kozdon) (EP 0 695 104 A2).

Regarding claim 1: Lee discloses a method for performing handover of a mobile station communicating in a first call via a first network to communication in a second call via a second network (see abstract; figs. 2A-2D; col. 7, lines 19-67), comprising:

generating a request for handover (abstract; col. 5, lines 49-65; col. 6, lines 33-59).

transferring data communication between the mobile station and the first network from the first call to the second call (see abstract; col. 7, lines 40-67). But, Lee does not explicitly teach about establishing the/a second call between the first network and the mobile station via the second network, as claimed by applicant. However, in a related field of endeavor, Kozdon teaches about a mobile telephone connection transfer technique wherein, upon detecting that signal strength of an active connection has fallen below a predetermined threshold, a mobile handset sends a request to a first mobile telephone system to set up an alternative connection from the first mobile telephone system to the mobile handset through a second mobile telephone system, and wherein the active connection is transferred to the alternate connection/call (see entire document, particularly abstract; col. 4, lines 12-39; col. 9, lines 8-22). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Lee with that of Kozdon for the advantage of transferring an active call/connection from one telephone system to another.

Regarding claim 2: Lee teaches a step of releasing the first call after data communication between the mobile station and the first network has been transferred from the first call to the second call (see col. 8, lines 59-62). Terminating a call properly transferred is same as releasing the call.

Regarding claim 4: Lee teaches a method wherein the first network generates the request for handover (see col. 6, lines 33-59).

Regarding claim 7: Lee teaches a method wherein the first network originates the second call (see col. 6, lines 33-59).

As per claim 12: Lee teaches a method wherein the first and second networks are cellular telephone networks (see abstract; col. 4, lines 18-40).

As per claim 13: Lee teaches a method wherein the mobile station is capable of communicating by radio with the first and second networks (see abstract; col. 5, lines 13-30; col. 6, lines 34-59).

As per claim 16: the features of claim 16 are similar to the features of claim 1 except claim 16 is directed to an apparatus to that performs the method steps of claim 1. Hence, since the apparatus is required by the method to perform its function, claim 16 has been rejected on the same ground and motivation as claim 1.

As per claim 17: the features of claim 17 are similar to the features of claim 1, except claim 17 is directed to an apparatus comprising means to perform handover functions following the method steps of claim 1. Since, the apparatus comprising the means is required by the method to perform handover functions following the steps of method claim 1, claim 17 has been rejected on the same ground and motivation as claim 1.

As per claim 18: Lee teaches a method of communicating data between a mobile station and a first network in a first call (see abstract). Other features of claim 18 are similar to the features of claim 1. Hence, claim 18 is rejected on the same ground as claim 1.

As per claim 19: the feature of claim 19 is similar to the feature of claim 2. Hence, claim 19 is rejected on the same ground and motivation as claim 2.

As per claim 20: Lee teaches, a method wherein the second call is originated by the first network (abstract).

As per claim 24: the features of claim 24 are similar to the features of claim 18, wherein claim 24 is directed to an apparatus that perform a handoff function following the steps of method claim 18. Hence, since the apparatus is required by the method, claim 24 is rejected on the same ground and motivation as claim 18.

As per claim 25: Lee teaches a mobile station, wherein the mobile station is arranged to release the first call with the first network responsive to data communication with the first network being transferred from the first call to the second call (see col. 8, lines 1-14, particularly lines 12-14).

As per claim 26: Kozdon teaches a mobile station, wherein the mobile station is arranged to generate a handover request responsive to the determination and transmit that request to the first network (abstract).

As per claim 27: the feature of claim 27 is similar to the feature of claim 26. Thus, claim 27 is rejected on the same ground and motivation as claim 26.

As per claim 28: Kozdon teaches a mobile station, wherein the mobile station is associated with an identifier that identifies it to the second network (see col. 4, lines 2-11). A telephone number can identify a mobile station.

As per claim 32: the features of claim 32 are similar to the features of claim 1. Hence, claim 32 is rejected on the same ground and motivation as claim 1.

As per claim 33: Kozdon teaches a network wherein is arranged to originate the second call (see col. 4, lines 2-11).

As per claim 34: Kozdon teaches a network wherein, the network element is arranged to determine that a handover is required responsive to receiving a handover request from the mobile station (see col. 4, lines 2-11).

As per claim 37: most of the features of claim 37 are similar to the features of claim 1, except – transmitting from the first network to the mobile station data indicating an identification of the handover operation, which is taught by Kozdon (see col. 4, lies 12-38). Hence, claim 37 is rejected on the same ground and motivation as claim 1.

As per claim 38: the feature of claim 28 is similar to the feature of claim 2. Hence, claim 28 is rejected on the same ground and motivation as claim 2.

As per claim 40: Kozdon teaches a method further comprising transmitting from the mobile station to the second network data indicating the identification of the handover operation (see co. 4, lines 17-25).

As per claim 44: the features of claim 44 are similar to the features of claim 1, except the feature – receive from the first network data indicating an identification of the handover operation, which is taught by Kozdon (see col. 4, lines 2-39). Therefore, claim 44 is rejected on the same ground and motivation as claim 1.

As per claim 45: Kozdon teaches a mobile station arranged to originate a second call (see col. 4, lines 24-39). Detecting, by a mobile handset, a dial tone sent from a first network and the mobile handset sending the dial-tone to a second network is a process of establishing/originating a second call with the second network.

As per claim 46: the feature of claim 46 is similar to the feature of claim 40. Hence, claim 46 is rejected on the same ground and motivation as claim 40.

As per claim 47: the feature of claim 47 is similar to the feature of claim 2. Hence, claim 47 is rejected on the same ground and motivation as claim 2.

As per claim 50: the features of claim 50 are similar to the features of claim 1 and the difference feature of claim 37. Hence, claim 50 is rejected on the same ground and motivation as claims 1 and 37.

As per claim 51: Lee teaches a network element, wherein the network element is arranged to receive from the second network data indicating an identification of the handover operation (see abstract). Lee's system is bi-directional intersystem soft handoff.

As per claim 53: Kozdon teaches a method comprising the second network being a different network from the first network (see abstract).

Claims 3, 5 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Duran et al. (Duran) (US 6,115,608).

Regarding claim 3: but, Lee does not explicitly teach about a method wherein a mobile station generates a request for handover, as claimed by applicant. However, in a related field of endeavor, -- "Intersystem Handover Method and Apparatus" --, Duran teaches that a mobile station is capable of initiating intersystem handover/handoff (see col. 3, lines 33-53; col. 7, lines 45-51; col. 10, lines 18-67). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Lee with that of Duran for the advantage of the mobile station to

monitor/detect and store the signal quality of nearby stations to make a decision as to when and to which BTS to handover.

Regarding claim 5: Duran, teaches a method wherein the mobile station originates the second call (see col. 3, lines 33-53; col. 7, lines 45-51; col. 10, lines 18-67). Since, the key question here is a mobile originating handoff request, the feature of claim 5 is similar to the feature of claim 3. Hence, claim 5 is rejected on the same ground and motivation as claim 3. **Explanation:** In Lee the mobile unit communicates with different systems simultaneously in intersystem soft handoff. In Duran, the mobile unit is shown to have initiated intersystem handoff. When the references are combined, the mobile unit would be able to initiate intersystem handoff via any of the BTS in either of the systems involved in the intersystem handoff. In other words, the key feature is the capability of the system wherein the mobile is enabled to communicate simultaneously with a first and second systems.

As per claim 39: the feature of claim 29 is similar to the feature of claim 3. Hence, claim 29 is rejected on the same ground and motivation as claim 29.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Byrne et al. (Byrne) (US 5,659,598).

As per claim 9: Lee does not explicitly teach about a method wherein the geographical coverage of the second network is greater than that of the first network, as claimed by applicant. However, in a related field of endeavor, Byrne teaches about a handover procedure from a cordless base station (cordless telephone system) to a mobile radio-telephone system, wherein the second system/network covers greater geographical

area than that of the first (see abstract). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee's reference with the teaching of Byrne for the advantage of enabling users to handover from a cordless telephone system (small area) to a mobile radio system (larger area).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Fernandez et al. (Fernandez) (US 2001/0022615 A1).

As per claim 10: but, Lee does not explicitly teach about a method wherein the first network is an IMT-200 network, as claimed by applicant. However, in a related field of endeavor, Fernandez teaches that IMT-2000 is a standard air interface for mobile/wireless radio communication equipment, like cellular (see page 4, paragraph 0042). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make a wireless/mobile radio equipment/system IMT-2000 air interface enabled since it is a standard to be met by any entity requiring the service provided by the standard.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Menich et al. (Menich) (US 6,449,305 B1).

As per claim 11: Lee does not explicitly teach/disclose about a method wherein the second network is a PDC network, as claimed by applicant. However, in a related field of endeavor, Menich teaches about a handoff technique between different networks that include CDMA, AMPS and PDC (see col. 4, line 65-col. 5, line 10). Therefore, it would

have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee's reference with the teaching of Menich for the advantage of providing mobile stations handoff services between networks that employ different protocols (see col. 35-48).

Response to Arguments

Applicant's arguments with respect to claims 1-13 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 15 is allowed.

The following is an examiner's statement of reasons for allowance:

As per claim 15: claim 15 is directed to the general area of handoff. The prior art of record does not teach or fairly suggest the techniques of handoff as recited in claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 6, 8, 21-23, 29-31, 35-36, 41-43, 48-49 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Meless Zewdu Zewdu, Meless

Examiner

09 November 2005.